FOODBORNE DISEASE

OPERATIONAL PLAN
January 1, 2008 – December 31, 2008

Part 2. Improve laboratory-based surveillance for emerging foodborne pathogens

A. PulseNet

Objective 1: Continue to perform PulseNet activities.

Staff will:

- Participate in PulseNet, with reporting of results to CDC as requested.
- Perform PFGE on all submitted *Salmonella*, *E. coli* O157:H7, and Listeria isolates.
- Use communication protocols to communicate clusters to the Epidemiology Program.
- Post clusters to the Webboard in a timely fashion.
- Monitor Webboard activity and respond to new postings within 48 hrs of the original posting.
- Attend the annual PulseNet meeting.

Measures of Effectiveness:

- *E.coli* O157:H7 and *L. monocytogenes* are tested by PFGE and uploaded within 96 hours.
- All other isolates submitted for PFGE testing are tested and uploaded within 2 weeks of receipt.
- Cluster and outbreak information is communicated to epidemiologists in a timely manner.
- Lab staff score >85% in annual competency exams specific for the PFGE Laboratory.
- The annual PulseNet meeting is attended by one PulseNet laboratorian

Personnel			***Travel***		
Person's Name	***FY '08 Amt. Requested***	***FY '07 Amt. Received***	***Trip***	***FY '08 Amt. Requested***	***FY '07 Amt. Received***
Tracy Stiles (lab)	$0	$0	Pulsenet Annual Mtg	$2,200	$1,000
Kara Watarida (lab)	$68,478	$0	Bionumerics training	$0	$1,000
Janet Sennott (lab)	$49,035	$50,930		$0	$0
Pat Kludt (epi)	$0	$0	Pulsenet Mtg	$1,000	$250

Equipment			***Supplies***		
Item	***FY '08 Amt. Requested***	***FY '07 Amt. Received***	***Item***	***FY '08 Amt. Requested***	***FY '07 Amt. Received***
			Lab supplies	$52,500	$20,000

****If additional space is needed, please add attachment and make notation in the "Justification" section.**

PulseNet Area Laboratories

Objective 1: To continue to perform the expanded responsibilities of a PulseNet Area Lab.

Staff will:

- Perform PFGE on isolates as required by PulseNet.
- Provide surge capacity for the region and train PulseNet staff from other states as requested.
- Provide phone or on-site consultation to northeast state labs as requested and/or necessary.
- Process and analyze isolates received from state labs in the northeast area as requested.
- Provide assistance with second enzyme testing to labs in area as requested.
- Coordinate quarterly conference calls within our area.
- Attend the annual PulseNet meeting and plan and hold a regional PulseNet meeting.
- Participate in additional projects and validations with CDC as needed.

Measures of Effectiveness:

- High-priority isolates received from northeastern state labs are analyzed within 3 business days.
- $\geq$ 75% of low-priority isolates from northeastern state labs are analyzed within 5 business days.
- Requests for training are met within one month from receipt of request.
- Requests for technical assistance are responded to within 24 hours of receipt of request.
- The annual PulseNet meeting is attended and a regional PulseNet meeting is organized and held.

Surveillance for Shiga toxin-producing *E. coli* (STEC) - new activity (NOT FUNDED)

Objective 1: To identify and characterize *E. coli* O157:H7 and other Shiga toxin-producing *E. coli*

Staff will:

Perform testing for identification and characterization of *E. coli* O157:H7 and other STEC, using conventional microbiological methods, enzyme immunoassay, and possibly PCR.

Measures of Effectiveness:

- All specimens submitted for identification of STEC will be tested in a timely fashion.
- Validation and optimization of a PCR assay for shiga toxin will begin.

Objective 2: To facilitate submission of STEC specimens to the laboratory given the new U.S. Department of Transportation guidelines for transportation of Category A infectious substances.

Staff will:

- Monitor receipt of improperly packaged specimens to the laboratory
- Assist hospital labs with the specimen submission process, by providing guidance and education materials relating to appropriate packaging and shipment of Category A infectious substances.

Measures of Effectiveness:

- The number of specimens received with improper packaging will decrease by at least 50%.
- A document with frequently asked questions relating to appropriate packaging and shipment of Category A infectious substances will be developed for sharing with hospital labs as needed.

Capacity for molecular identification of foodborne viruses (NOT FUNDED)

***Objective 1*:** Continue providing norovirus testing in support of outbreak investigations, and complete validation of RTD-PCR norovirus assay.

Staff will:

- Test outbreak-related specimens (up to 150) for norovirus.
- Submit specimens to the CDC for confirmation and sequencing.
- Work to validate real-time PCR on the Applied Biosystems 7500.

Measures of Effectiveness:

- Specimens are tested by RT-PCR method and submitted to CDC, if requested, in a timely manner.
- A real-time PCR method is validated on the Applied Biosystems 7500.

NARMS

Objective 1: Identify and ship every 20th isolate of *Salmonella* species, *Shigella* species, and *E. coli* O157:H7, and every isolate of *S. typhi*, *Listeria*, and *Vibrio* non-cholera to NARMS.

Measures of Effectiveness:

- All 2007 isolates that meet the specified criteria are correctly identified and submitted.

Objective 2: Participate in other NARMS activities such as conference calls and submission of additional isolates requested by NARMS.

Measures of Effectiveness:

- All 2007 calls are attended by appropriate laboratory and epidemiology staff.
- All additional isolates requested by NARMS are submitted to NARMS.

Objective 3: Participate in the NARMS *Salmonella* serotyping QA/QC Program

Measures of Effectiveness:

- The *Salmonella* QA/QC panel is serotyped and results reported to NARMS.
- Discrepant results are investigated and corrective actions documented.